Docket No.: 2523-072 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	
	:	
Rikuro OBARA	:	
	:	
Serial No. To Be Assigned	:	Group Art Unit:
	:	
Filed: February 27, 2002	:	Examiner:
	:	

For: MOTOR

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

Preliminary to computation of the filing fee for the above identified application, please amend the same as follows to eliminate multiple dependent claims.

IN THE CLAIMS

Please rewrite the claims as follows.

Clean Copy of Amended Claims

5 (Amended). The motor recited in claim 1, characterized in that a thin walled reduced outer diameter portion is formed around the outer periphery of the central portion of the outer ring member of the bearing device, and the squeeze member is press fit around the reduced outer diameter portion.

6 (Amended). The motor according to claim 1, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and the squeeze member is press fit around the reduced outer diameter stepped portions.

7 (Amended). The motor according to claim 1, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and each of the first and the second squeeze members is press fit around the reduced outer diameter stepped portions respectively.

8 (Amended). The motor according to claim 1, characterized in that the squeeze member of the bearing device is a cylindrical body formed on the inner periphery of which with a thick walled reduced inner diameter portion having an inner diameter smaller than the outer diameter of the outer ring member, an axial width of the

thick walled portion is smaller than the spacing between two rows of outer raceways, and the outer ring member is pressed by the reduced inner diameter portion of the cylindrical body.

9 (Amended). The motor according to claim 1, characterized in that the squeeze member of the bearing device is a cylindrical body formed on the inner periphery of which with a thick walled reduced inner diameter portion having an inner diameter smaller than the outer diameter of the outer ring member, an axial width of the thick walled portion is smaller than the spacing between two rows of outer raceways, and the outer ring member is pressed by the reduced inner diameter portion of the cylindrical body, wherein the shaft is secured on the base member to extend therefrom, and the central portion of the rotor or the rotating member is fit over the outer periphery of the cylindrical body.

10 (Amended). The motor according to claim 1, characterized in that the balls of the bearing device are formed of ceramic material.

11 (Amended). The motor according to claim 1, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

12 (New). The motor according to claim 2, characterized in that a thin walled reduced outer diameter portion is formed around the outer periphery of the central portion of the outer ring member of the bearing device, and the squeeze member is press fit around the reduced outer diameter portion.

13(New).The motor according to claim 3, characterized in that a thin walled reduced outer diameter portion is formed around the outer periphery of the central portion of the outer ring member of the bearing device, and the squeeze member is press fit around the reduced outer diameter portion.

14(New).The motor according to claim 4, characterized in that a thin walled reduced outer diameter portion is formed around the outer periphery of the central portion of the outer ring member of the bearing device, and the squeeze member is press fit around the reduced outer diameter portion.

15(New).The motor according to claim 2, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end

portions of the first and the second sleeve outer rings, and the squeeze member is press fit around the reduced outer diameter stepped portions.

16(New).The motor according to claim 3, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and the squeeze member is press fit around the reduced outer diameter stepped portions.

17(New).The motor according to claim 4, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and the squeeze member is press fit around the reduced outer diameter stepped portions.

18(New).The motor according to claim 2, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings

adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and each of the first and the second squeeze members is press fit around the reduced outer diameter stepped portions respectively.

19(New).The motor according to claim 3, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and each of the first and the second squeeze members is press fit around the reduced outer diameter stepped portions respectively.

20(New).The motor according to claim 4, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end

portions of the first and the second sleeve outer rings, and each of the first and the second squeeze members is press fit around the reduced outer diameter stepped portions respectively.

21(New).The motor according to claim 2, characterized in that the squeeze member of the bearing device is a cylindrical body formed on the inner periphery of which with a thick walled reduced inner diameter portion having an inner diameter smaller than the outer diameter of the outer ring member, an axial width of the thick walled portion is smaller than the spacing between two rows of outer raceways, and the outer ring member is pressed by the reduced inner diameter portion of the cylindrical body.

22(New).The motor according to claim 2, characterized in that the squeeze member of the bearing device is a cylindrical body formed on the inner periphery of which with a thick walled reduced inner diameter portion having an inner diameter smaller than the outer diameter of the outer ring member, an axial width of the thick walled portion is smaller than the spacing between two rows of outer raceways, and the outer ring member is pressed by the reduced inner diameter portion of the cylindrical body, wherein the shaft is secured on the base member to extend therefrom, and the central portion of the rotor or the rotating member is fit over the outer periphery of the cylindrical body.

23(New).The motor according to claim 2, characterized in that the balls of the bearing device are formed of ceramic material.

24(New).The motor according to claim 3, characterized in that the balls of the bearing device are formed of ceramic material.

25(New).The motor according to claim 4, characterized in that the balls of the bearing device are formed of ceramic material.

26(New).The motor according to claim 2, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

27(New).The motor according to claim 3, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

28(New).The motor according to claim 4, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

29(New).The motor according to claim 5, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

30(New).The motor according to claim 6, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

31 (New). The motor according to claim 7, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

Marked Up Copy of Amended Claims

5 (Amended). The motor according to any one of claims claim 1 to 4, characterized in that a thin walled reduced outer diameter portion is formed around the outer periphery of the central portion of the outer ring member of the bearing device, and the squeeze member is press fit around the reduced outer diameter portion.

6 (Amended). The motor according to any one of claims claim 1 to 4, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and the squeeze member is press fit around the reduced outer diameter stepped portions.

7 (Amended). The motor according to any one of claims claim 1 to 4, characterized in that the outer ring member of the bearing device includes the first and the second sleeve outer rings adjacent axially with each other, each of the first and the second outer raceways is formed on the inner surface of the first and the second sleeve outer rings respectively, thin walled reduced outer diameter stepped portions are formed around adjacent end portions of the first and the second sleeve outer rings, and each of

the first and the second squeeze members is press fit around the reduced outer diameter stepped portions respectively.

8 (Amended). The motor according to claim 1 or 2, characterized in that the squeeze member of the bearing device is a cylindrical body formed on the inner periphery of which with a thick walled reduced inner diameter portion having an inner diameter smaller than the outer diameter of the outer ring member, an axial width of the thick walled portion is smaller than the spacing between two rows of outer raceways, and the outer ring member is pressed by the reduced inner diameter portion of the cylindrical body.

9 (Amended). The motor according to claim 1 or 2, characterized in that the squeeze member of the bearing device is a cylindrical body formed on the inner periphery of which with a thick walled reduced inner diameter portion having an inner diameter smaller than the outer diameter of the outer ring member, an axial width of the thick walled portion is smaller than the spacing between two rows of outer raceways, and the outer ring member is pressed by the reduced inner diameter portion of the cylindrical body, wherein the shaft is secured on the base member to extend therefrom, and the central portion of the rotor or the rotating member is fit over the outer periphery of the cylindrical body.

10 (Amended). The motor according to any one of claims claim 1 to 4, characterized in that the balls of the bearing device are formed of ceramic material.

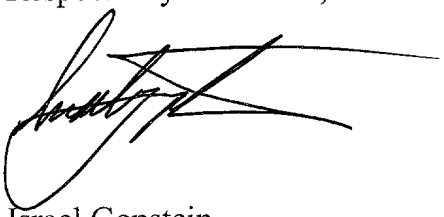
11 (Amended). The motor according to any one of claims claim 1 to 7, characterized in that the squeeze member is formed of a material lower in its linear thermal expansion than that of the outer ring member.

REMARKS

The present amendment eliminates the multiple dependency of claims 5-11 in the above identified application, and presents the amended claims with explicit single dependency on each of the claims identified in the original specification.

Accordingly, the filing fee for the present application is calculated free of the multiple dependency fee.

Respectfully submitted,



Israel Gopstein
Registration No. 27,333

P. O. Box 9303
Silver Spring, MD 20916-9303
(301) 438-9600
(301) 438-9700 (fax)
Date: February 27, 2002